NEWS

2023: multiple climate records broken

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A number of climate records were broken last year, according to a new report from the World Meteorological Organization (WMO).

Last year (2023) saw the highest value for global temperature since 1850, beating the previous record set in 2016 by a considerable margin.

2023 also saw other climate records being set including for ocean heat, sea level rise, Antarctic sea ice loss and glacier retreat.

Nick Rayner of the Met Office said: “Climate scientists, including those from the Met Office, monitoring the earth during 2023 reveal that a number of global climate change indicators reached record levels last year. From Antarctic sea ice to the heat of the ocean, and from the glacier retreat to the overall temperature of the globe, 2023 was a record-breaking year.”

Key climate indicators which saw a record in 2023

- **Global temperature** in 2023 was the warmest in the 174-year observational record. At 1.45°C it exceeded the previous record in 2016 of 1.29°C
- **Antarctic sea-ice** extent reached an absolute record low for the satellite era (since 1979) in February 2023 (the so-called summer minimum). It remained at record low for the time of year from June until early November.
- **Ocean heat content** reached its highest level in 2023. Warming rates show a particularly strong increase in the past two decades. A number of marine heatwaves in the Northern Hemisphere boosted ocean heat content last year.
- **Glacial retreat** was pronounced last year with preliminary data from a reference set of glaciers suffered the largest loss of ice on record for the period 1950-2023. Extremely negative figures were noted from western North America and Europe.

The Met Office provides evidence to the WMO report. Much of the data we provide is available through the Met Office climate dashboard.

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